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09/955,223	09/19/2001	Simon Riches	1509-218	8329

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EXAMINER

CHAI, LONGBIT

ART UNIT PAPER NUMBER

2131

DATE MAILED: 05/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/955,223

Applicant(s)

RICHES ET AL.

Examiner

Longbit Chai

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-7, 10-23, 25-28, 34, 37, 38 and 63-69 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-7, 10-23, 25-28, 34, 37, 38 and 63-69 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1 – 62 have been presented for examination. Claims 2, 3, 8, 9, 24, 29 – 33, 35, 36 and 39 – 62 have been canceled; claims 10 – 23, 25 – 28, 34, 37 and 38 have been amended; and new claims 63 – 89 have been added in an amendment filed 4/4/2005. Claims 4 – 7, 10 – 23, 25 – 28, 34, 37, 38 and 63 – 89 have been examined.

Response to Arguments

1. Applicant's arguments filed on 4/4/2005 with respect to the instant claims have been fully considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraph of 35 U.S.C. 102 that forms the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 63 and 64 are rejected under 35 U.S.C. 102(b) as being anticipated by Johnston (Patent Number: 5287478).

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As per claim 63 and 64, Johnston teaches a method of protecting data recorded during plural data recording sessions to a data storage medium, the sessions occurring at different times, the method comprising:

creating a code after each data recording session has been completed, the code created after each data recording session representing the recorded data and the session during which the data was recorded (Johnston: Column 10 Line 48 – 55 and Column 9 Line 27: Johnston teaches ECC checksum is calculated to verify that the track has been properly written into the track and the data is always written one group at a time and thereby Johnston teaches the code created after each data recording session representing the recorded data and the session during which the data was recorded to meet the claim language);

making a record of the created codes and advancing the record of the created codes so that the new code that is created after each data recording session is added to the record of the created codes (Johnston: Column 11 Line 13 – 21).

preventing overwriting of code within the record of the created codes after completion of a data recording session (Johnston: Column 11 Line 13 – 21: Johnston teaches writing the subcode and block ID into the memory space in the track and when the track is written to the tape, ECC parity is appended to each track's data block pairs. Examiner notes, in this way to meet the claim language, the record of the created codes is indeed stored with the tape which is appended following after each track's data block and thereby overwriting of code within the record of the created codes after completion of a data recording session can thus be prevented).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A person shall be entitled to a patent unless –

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 4 – 7, 10 – 12, 14 – 23, 25 – 28, 34, 37, 38, 63 – 71 and 73 – 89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shnelvar (Patent Number: US 6374266 B1), in view of Johnston (Patent Number: 5287478).

As per claim 63 and 64, Shnelvar teaches a method of protecting data recorded during plural data recording sessions to a data storage medium, the sessions occurring at different times, the method comprising:

making a record of the created codes and advancing the record of the created codes so that the new code that is created after each data recording session is added to the record of the created codes (Shnelvar: Column 6 Line 17 – 21 and Figure 3 Element 62: Each table entry has a data hash value & pointer to the repository allocation unit).

preventing overwriting of code within the record of the created codes after completion of a data recording session (Shnelvar: Column 7 Line 34 – 40 and Figure 8 Element 74A).

Shnelvar teaches the code is created representing the data source, the code created after each data recording session representing the recorded data and the session during which the data was recorded (Shnelvar: Column 6 Line 17 – 21 and Figure 3 Element 62).

However, Shnelvar does not teach creating a code after each data recording session has been completed.

Johnston teaches creating a code after each data recording session has been completed, the code created after each data recording session representing the recorded data and the session during which the data was recorded (Johnston: Column 10 Line 48 – 55 and Column 9 Line 27: Johnston teaches ECC checksum is calculated to verify that the track has been properly written into the track and the data is always written one group at a time and thereby Johnston teaches the code created after each data recording session representing the recorded data and the session during which the data was recorded to meet the claim language);

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Johnston within the system of Shnelvar because Johnston teaches providing a more reliable data recording system where each ECC checksum is calculated in the way after each data recording session has been completed so that whether the track has been properly written into the track or not can be successfully validated (Johnston: see for example, Column 10 Line 48 – 55).

As per claim 65 (and claim 4), Shnelvar as modified teaches the code is associated with recorded data of a recording session, and the processor arrangement is arranged for allocating an identification symbol to the code (Shnelvar: Column 6 Line 17 – 21 and Figure 3 Element 62 & Johnston: Column 10 Line 48 – 55).

As per claim 66 (and claim 5), Shnelvar as modified teaches the processor arrangement is arranged for recording the codes by writing the codes as entries to a memory and for writing the identification symbol to the memory (Shnelvar: Column 5 Line 35 – 60, Column 6 Line 17 – 21 & Johnston: Column 10 Line 48 – 55).

As per claim 67 (and claim 6), Shnelvar as modified teaches the memory is included in a memory device (Shnelvar: see for example, Column 5 Line 35 – 60 & Figure 3 Element 60).

As per claim 68 (and claim 7), Shnelvar as modified teaches the memory is included in a dedicated area of the medium, the dedicated area being set aside for this purpose (Shnelvar: see for example, Column 5 Line 35 – 60 & Figure 3 Element 60).

As per claim 69 (and claim 10), Shnelvar as modified teaches the processor arrangement is arranged to write the identification symbol as a number corresponding to the position of a particular code entry within a sequence of such code entries (Shnelvar: see for example, Figure 3 Element 60).

As per claim 70 (and claim 11), Shnelvar as modified teaches the processor arrangement is arranged for:

reading back from the medium data representing the recorded data of each session and creating a further code representative of the content of the recorded data of each session as read back from the medium (Johnston: Column 10 Line 48 – 55 and Column 9 Line 27: Johnston teaches ECC checksum is calculated to verify that the track has been properly written into the track and the data is always written one group at a time and thereby Johnston teaches the code created after each data recording session representing the recorded data and the session during which the data was recorded to meet the claim language);

comparing the two codes; and confirming as valid the recorded data of each session only in response to an indication that the two codes agree (Johnston: Column 10 Line 48 – 55).

As per claim 71 (and claim 12), Shnelvar as modified teaches the processor arrangement is arranged to (a) create the medium as a result of writing the recorded data of each session to the medium as entries to a table in the memory (Shnelvar: Column 5 Line 35 – 60, Column 6 Line 17 – 21 & Johnston: Column 10 Line 48 – 55), and (b) identifying each entry by its position within the table (Shnelvar: Column 5 Line 35 – 60, Column 6 Line 17 – 21 & Johnston: Column 10 Line 48 – 55).

As per claim 73 (and claim 14), Shnelvar as modified teaches the processor arrangement is arranged to create the codes so they include a checksum or a cyclic redundancy check (Shnelvar: see for example, Column 6 Line 17 – 21).

As per claim 74 (and claim 15), Shnelvar as modified teaches the memory device includes a memory of a cartridge, the medium is a tape in the cartridge, and the processor arrangement is arranged to write the codes on the memory of the cartridge (Shnelvar: see for example, Figure 3 Element 60).

As per claim 75 (and claim 16), Shnelvar as modified teaches the identification symbol includes a number (Shnelvar: see for example, Column 6 Line 17 – 21).

As per claim 76 (and claim 17), Shnelvar as modified teaches the identification symbol includes an integer (Shnelvar: see for example, Figure 3 Element 60).

As per claim 77 (and claim 18), Shnelvar as modified teaches the processor arrangement is arranged so that each time the data representing the recorded data of each session is written to the medium and a corresponding associated code is written to the memory, the next code representative of the next data set is entered as the next entry to the memory (Shnelvar: Figure 3 Element 60, Column 5 Line 35 – 60, Column 6 Line 17 – 21 & Johnston: Column 10 Line 48 – 55).

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As per claim 78 (and claim 19), Shnelvar as modified teaches the processor arrangement is arranged for keeping count of the total number of codes written to the memory (Shnelvar: see for example, Column 5 Line 35 – 60 & Figure 8).

As per claim 79 (and claim 20), Shnelvar as modified teaches wherein the processor arrangement is arranged for checking whether a predetermined number of entries has been exceeded, and if it has, reporting the medium as a read-only medium (Shnelvar: see for example, Shnelvar: see for example, Column 5 Line 35 – 60, Column 6 Line 17 – 21, Column 7 Line 34 – 40 & Figure 8).

As per claim 80 (and claim 21), Shnelvar as modified teaches said predetermined number of entries is 16 (Shnelvar: see for example, Figure 3 Element 60). Shnelvar does not disclose expressly predetermined number of entries is 16. However, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Shnelvar to accommodate predetermined number of entries is 16 because Shnelvar teaches using a table to store the code (Shnelvar: see for example, Figure 3 Element 60).

As per claim 81 (and claim 22), Shnelvar as modified teaches the processor arrangement is arranged for:

(a) comparing the associated code with information held on a secure database;
and

(b) confirming the medium and/or the data contained thereon as valid only if the code and its association with the data representing the recorded data of each session agree with the information held on the secure database (Shnelvar: see for example, Column 5 Line 35 – 60, Column 6 Line 17 – 21 & Johnston: Column 10 Line 48 – 55).

As per claim 82 (and claim 23), Shnelvar as modified teaches said information held on the secure database includes a secure copy of the code (Shnelvar: see for example, Shnelvar: see for example, Column 5 Line 35 – 60, Column 6 Line 17 – 21 & Figure 3).

As per claim 83 & 84 (and claim 25 & 26), Shnelvar as modified teaches the processor arrangement includes a controlling software application for comparing and/or confirming operations (Shnelvar: see for example, Column 5 Line 35 – 60, Column 6 Line 17 – 21 & Johnston: Column 10 Line 48 – 55).

As per claim 85 & 86 (and claim 27 & 28), Shnelvar as modified teaches the processor arrangement includes an external reader for accessing and/or displaying information recorded in the memory and for performing the comparing and/or confirming operations (Shnelvar: see for example, Column 5 Line 35 – 60 & Figure 1 Element 20 ⇔ 26).

As per claim 87 (and claim 34), Shnelvar as modified teaches the processor arrangement is arranged to record the first named code stored by causing the first named code to be written as an entry written to a memory device (Shnelvar: see for example, Figure 3 Element 60).

As per claim 88 (and claim 37), Shnelvar as modified teaches the processor arrangement is arranged to perform each code creating step by writing to and/or reading from the medium (Johnston: Column 10 Line 48 – 55).

As per claim 89 (and claim 38), Shnelvar as modified teaches the processor arrangement includes a controlling software application for performing each code creating step (Shnelvar: Figure 3 Element 60, Column 5 Line 35 – 60, Column 6 Line 17 – 21 & Johnston: Column 10 Line 48 – 55).

4. Claims 13 and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shnelvar (Patent Number: US 6374266 B1), in view of Gold (Patent Number: US 6701450 B1).

As per claim 13 and 72, Shnelvar does not disclose expressly said processor arrangement is arranged to create the codes so they include a signature.

Gold teaches said processor arrangement is arranged to create the codes so they include a signature (Gold: see for example, Column 20 Line 24 – 31).

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It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Gold within the system of Shnelvar because Gold teaches providing a more convenient data backup and recovery solution in data processing systems (Gold: see for example, Column 3 Line 20 – 21 and Column 1 Line 5 – 8).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Longbit Chai whose telephone number is 571-272-3788. The examiner can normally be reached on Monday-Friday 8:00am-4:00pm.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


LBC

Longbit Chai
Examiner
Art Unit 2131


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